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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,082	03/02/2004	Katie Hoberman	A04P1018	4890
36802	7590	07/19/2007		
PACESETTER, INC. 15900 VALLEY VIEW COURT SYLMAR, CA 91392-9221			EXAMINER BOCKELMAN, MARK	
			ART UNIT	PAPER NUMBER
			3766	
			MAIL DATE	DELIVERY MODE
			07/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/792,082

### Applicant(s)

HOBERMAN ET AL.

### Examiner

Mark W. Bockelman

### Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-16, 18-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3-2-04, 8-25-05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 6 and 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4-18-2007.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7 -13, 18-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Schloss et al. USPN 6,934,585.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

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inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Schloss et al describe the claim invention beginning at column 10 line 55 to column 11 line 67. Atrial and ventricular detectors sense various atrial and ventricular events and distinguish ventricular paced events from ventricular sensed events. An algorithm determines values for the application of two distinct PVAB values, which are selectively applied upon the determination of whether a ventricle sense or pace event is detected. A telemetry device (254, 264) allows programmable parameters to be sent to the implantable device and substituted for previous stored parameters. The examiner considers the algorithm in figure 4 to be a search routine and the decision blocks 406, 422 selecting between a maintained PVAB value and an extended PVAB value. As noted at the top of column 12, the system implemented is to monitor far field sensing and to minimize incorrect events assessment. The device is implemented continuously, selecting new values, which may be increasing in the event that instability is detected upon each new evaluation.

Claims 1-3, 9-13, 18-21, 23-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim USPN 6,643,547. The Kim device teaches the use of and implantable device that uses atrial and ventricle sensors and pacing to treat tachycardia. The sensor senses ventricular event rate at a first PVAB value and upon exceeding a limit and shortens the PVAB interval so as to avoid a false ventricular tachycardia determination. The PVAB interval may be shortened by a

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predetermined amount or based upon the ventricular event rate. Ventricular pacing therapy may then be applied if necessary. The examiner considers the device to select from a multitude of PVAB values. A first and second value is based upon intrinsic ventricle sensing wherein a PVAB has at least two values corresponding to subthreshold and suprathreshold detection. The device uses at least the second value (or a variation of the second value) during ventricular tachycardia therapy. Thus there is a criteria where ventricular intrinsic detection results in selection of one PVAB value and a second criteria wherein a different PVAB value is selected when ventricular pacing is implemented. The examiner notes that any value is programmable and the Kim device would be programmed at least before use by some type of programming device. The instructions for operating the system as well the algorithms run, ultimately cause the determination of which PVAB to be applied. The programmer would obviously be some type of external device. Applicant's structure is implicit.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5, 7-8, 14-16 and 22 are rejected under 35 U.S.C. 103(a) as being obvious over Kim USPN 6,643,547.

Applicant differs from Kim in reciting a far field testing algorithm to select an appropriate value for the PVAB interval. It is well established that each of the references cited use a PVAB interval to avoid far field detection errors but require modification to the interval length avoid atrial undersensing. To have implemented a testing scheme that determines to best PVAB interval to obtain this balance by altering the PVAB interval and determining that far field detection is minimized would have been obvious.

Claims 1-5, 7-16, 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florio et al USPN 6,477,416 in view of Kim USPN 6,643,547 and/or WO 97/11748. Florio et al teach a device for sensing cardiac activity and applying or not applying a PVAB in the event that a detected ventricular event is either a ventricular paced event or a ventricular sensed event respectively. See column 4, lines 28-30. Applicant differs in providing two different PVABs rather than no applying one at all. Kim 6,643,547 teach a similar determination method in which a second PVAB can be selected from one that has a value of zero, one that is not applied at all or one that is shortened. To have merely selected a value of zero, thereby having a second PVAB interval value, in place of non implementation would have been an obvious equivalent arrangement to achieve the same function. In addition, to have provided a second non -zero value to achieve to guard against some far field intervention would have been obvious to one of ordinary skill in the art. Incrementally lengthening the interval until far field detection is eliminated would have been obvious in that it is a frequently used

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techniques in cardiac pacemakers to lengthen an interval to maximize or minimize a parameter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark W. Bockelman whose telephone number is (571) 272-4941. The examiner can normally be reached on Monday - Friday 10:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272 -4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MWB

June 25, 2007

  
MARK BOCKELMAN  
PRIMARY EXAMINER